

# Water Quality Standards Academy

## *Designated Uses*



# Module Outline

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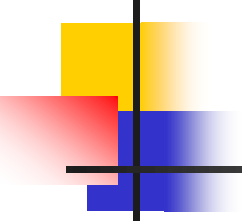
- What are designated uses? Why are they important?
- What are some examples of designated uses?
- What is the statutory and regulatory basis for them?
- What are my options for refining uses?
- What are existing uses?
- What is a use attainability analysis?



# What are Designated Uses?

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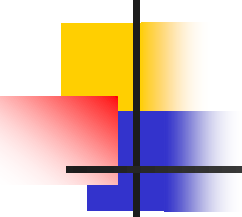
- Designated uses are “those uses specified in state or tribal water quality standards regulations for each water body or segment **whether or not they are being attained.**”
- Designated uses may be thought of as:
  - Water quality goals
  - Management objectives
  - Communication tools
  - Functions and/or activities that are supported by a level of water quality



# Why are Designated Uses Important? (1)

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- Designated uses are an important component of WQS
- Establish water quality goals for a specific water body and communicate these goals to the public.



# Why are Designated Uses Important? (2)

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- Determine criteria needed to protect use
  - Criteria are the regulatory basis for management actions like attainment decisions, TMDLs, and NPDES permit limits
- If WQS function to achieve CWA goals and restore water quality, we must ensure the designated uses are right!

# What are Examples of Designated Use Categories? (1)

- Protection of aquatic life (fish, shellfish, waterfowl, etc.)
- Recreation (swimming, surfing, boating, fishing, wading, etc.)
- Domestic water supply
- Livestock irrigation
- Navigation



# What are Examples of Designated Use Categories? (2)

- Ceremonial Uses (baptisms)
- Shellfish Harvesting
- Wildlife Protection
- Endangered Species Protection
- Hydroelectric Power
- ...and the list goes on!





# District of Columbia's Designated Uses

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- Primary contact recreation
- Secondary contact recreation and aesthetic enjoyment
- Protection and propagation of fish, shellfish, and wildlife
- Protection of human health related to consumption of fish and shellfish
- Navigation

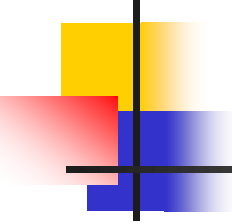




# Virginia's Designated Uses

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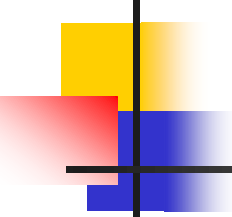
- Recreational uses (e.g., swimming and boating)
- Propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them
- Wildlife
- Production of edible and marketable natural resources, e.g., fish and shellfish



# Where Does the CWA Talk About Uses? (1)

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- CWA 101(a)(2) sets a national goal that, wherever attainable, water quality provides for the protection and propagation of fish, shellfish and wildlife, and recreation in and on the water
  - Includes protection of aquatic life for human consumption



# Where Does the CWA Talk About Uses? (2)

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- CWA 303 (c)(2)(a): water quality standards shall serve the purposes of the [Act] and consider the use and value for public water supplies, propagation of fish and wildlife, recreational, agricultural, industrial and other purposes, and...navigation

# What Does the CWA Mean by "Use"?



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- A function of, or activity in, a water that is supported by a level of water quality



# What are EPA's Regulatory Expectations for Designated Uses?

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- EPA's regs state that designated uses:
  - Be specified in State and Tribal WQS regulations
  - Consider all uses identified in CWA 101(a) and 303(c)
  - Do not provide for waste transport or waste assimilation
  - Provide for attainment/maintenance of WQS of downstream waters
  - Be established through a public process



# What is a "Rebuttable Presumption"?

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- The WQS regulations at 40 CFR Part 131 effectively establish a "rebuttable presumption" that uses specified in CWA 101 (a)(2) are attainable
- If a state or tribe disagrees, regulations require appropriate documentation to show such uses are not attainable (i.e. **Use Attainability Analysis** or UAA)
- States and Tribes have the primary role in establishing uses and in weighing evidence regarding their attainability



# May States/Tribes Refine Their Designated Uses?

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- Use refinement is a broad term relating to any activity to review and revise the designated uses
- States may refine their designated uses to reflect more specific goals and to more clearly reflect the attainable use

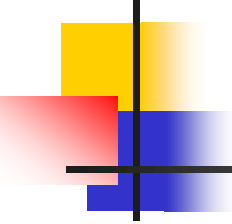


# Why are Refinements to Designated Uses Important ?

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- Help states/tribes clearly communicate their water quality objectives to stakeholders
- More specificity allows states/tribes to adopt more effective criteria and thus more appropriate endpoints for permits and TMDLs.





# What are Some Examples of Refined Uses?

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## ■ Recreation:

- Primary contact recreation/secondary contact recreation
- Seasonal primary contact recreation May 1 - October 1/secondary contact recreation all other times

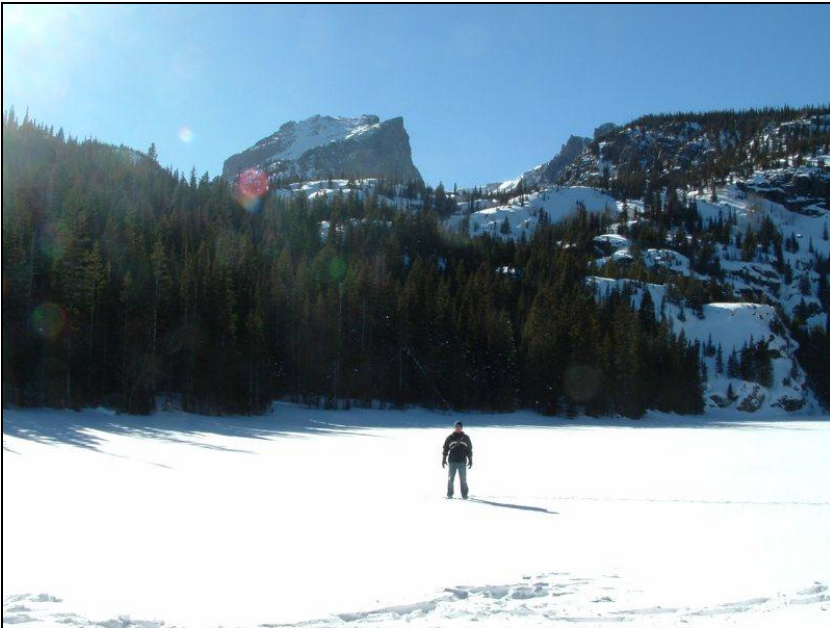
## ■ Aquatic Life:

- Warmwater fishery/coldwater fishery
- Trout rearing/trout spawning

# Primary and Secondary Recreation



# Seasonal Uses: Same Lake, Different Seasons...



# How has Oregon Refined its Uses?

- Beneficial Use - "Fish Use"
- Sub-categories:
  - Salmon and Steelhead migration corridors
  - Salmon and Steelhead spawning through fry emergence
  - Redband or Lahontan cutthroat trout





# How has Virginia Refined its Uses?

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- Designated use - "Propagation and growth of a balanced, indigenous population of aquatic life...."
- Sub-categories:
  - Migratory Fish Spawning and Nursery Designated Use
  - Shallow-Water Submerged Aquatic Vegetation Designated Use
  - Open-Water Aquatic Life Designated Use

# What are EPA's Expectations When Refining Uses?



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- When adopting a subcategory of a use specified in CWA 101(a)(2) with less stringent criteria than previously designated use, a UAA is required
- May not remove a designated use if doing so removes protection for an **existing use**



# What are Existing Uses? (1)

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- Existing uses are those uses actually attained in a waterbody on or after November 28, 1975, whether or not they are included in the water quality standards
- Existing uses serve as a baseline or “floor” of water quality, below which we don’t want to drop



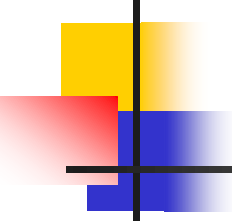


# What are Existing Uses (2)?

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- Existing uses are known to be “attained” when **both** the use and the water quality necessary to support the use has been achieved:
  - Swimming in a CSO-impacted waterbody
  - Trout fishery in mining impacted waters (high levels cadmium, zinc)
- Where data may be limited, inconclusive, or not available, states/tribes have discretion to determine when an existing use has been attained.





# How Do I Determine an Existing Use?

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- Made on a site-specific basis
- Consider the quantity, quality, and reliability of different types of available data
- Determine the extent to which water quality since 1975 has supported an actual use occurring in the water



# What is the Difference Between Existing Uses and Designated Uses?

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- Existing uses are not generally adopted into state/tribal law
- State and tribes are not bound to describe existing uses in the same way their WQS articulate designated use
  - Existing uses can be expressed more specifically than designated uses, to reflect degree of use actually attained



# What is the Difference Between Existing Uses and Designated Uses?

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"Designated uses focus on the attainable condition while existing uses focus on the past or present condition."



# Remember...

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- Existing uses only come into play when refining or removing a designated use.



# Take Home Messages

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- Designated uses are an important component of water quality standards
- Uses specified in section 101(a)(2) of the Act are presumed attainable unless a state demonstrates otherwise through a UAA
  - States/tribes have more discretion when designating 303(c) uses
- EPA encourages use refinements to reflect more specific uses
- Existing uses may never be removed



# UAAs: A Sneak Preview

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- The WQS regulation recognizes that situations exist where designated uses may not be attainable.
  - A use may not be attainable due to any one of six regulatory factors identified in the regulation.
- The UAA process helps a state/tribe determine whether a use is attainable and, if not, the highest attainable use that is attainable for the water body.
- UAA provides a defensible rationale and record of decision when adopting a new or revised WQS.



# Questions?

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# Review Questions #1

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- True or False. A designated use must apply to an entire waterbody.





# Review Questions #1

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- True or False. A designated use must apply to an entire waterbody.
- Answer:
  - False. Uses can be designated for waterbody segments.



# Review Questions #2

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- Which of the following cannot be a State/Tribal designated use?
  - a. navigation
  - b. boating
  - c. propagation of fish
  - d. waste transport
  - e. drinking water
  - f. swimming



# Review Questions #2

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- Which of the following cannot be a State/Tribal designated use?
  - a. navigation
  - b. boating
  - c. propagation of fish
  - d. waste transport
  - e. drinking water
  - f. swimming
  
- Answer:
  - d. A State/Tribe may not adopt waste transport or waste assimilation as a designated use.



# Review Questions #3

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- What is the minimum designated use(s) expected by the Water Quality Standards regulations?
  - a. propagation of fish
  - b. fishable/swimmable
  - c. drinking water
  - d. navigation
  - e. agriculture



# Review Questions #3

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- What is the minimum designated use(s) expected by the Water Quality Standards regulations?
  - a. propagation of fish
  - b. fishable/swimmable
  - c. drinking water
  - d. navigation
  - e. agriculture
- Answer:
  - *b. Unless a State or Tribe can demonstrate that the use is unattainable, the minimum use that must be designated is fishable/swimmable.*



# Review Questions #4

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- True or False. A use must be attained before the State or Tribe can designate it for a particular waterbody



# Review Questions #4

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- True or False. A use must be attained before the State or Tribe can designate it for a particular waterbody
  
- Answer:
  - *False. A designated use can be specified by the State or Tribe whether or not it is being attained for a waterbody.*



# Review Questions #5

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- Recreation is often divided into what two subcategories?
  - a. primary contact/secondary contact
  - b. fishing/swimming
  - c. boating/wading
  - d. summer/winter





# Review Questions #5

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- Recreation is often divided into what two subcategories?

- a. primary contact/secondary contact
- b. fishing/swimming
- c. boating/wading
- d. summer/winter

- Answer:

- a. *Primary contact protects people from illness due to immersion. Secondary contact protects people when immersion is unlikely.*